

# PRODUCT INFORMATION



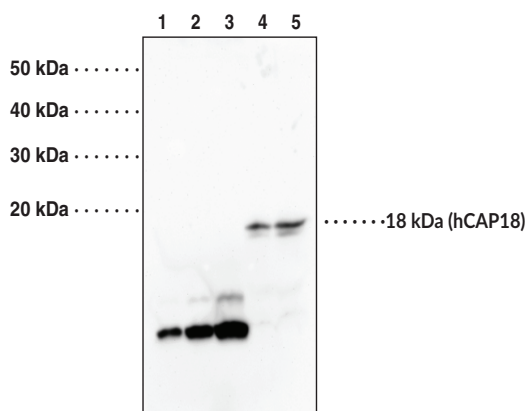
## LL-37 Polyclonal Antibody

Item No. 15637

### Overview and Properties

<b>Contents:</b>	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
<b>Synonym:</b>	Antibacterial Protein LL-37
<b>Immunogen:</b>	Synthetic human LL-37
<b>Cross Reactivity:</b>	(+) LL-37, hCAP18
<b>Species Reactivity:</b>	(+) Human
<b>Uniprot No.:</b>	P49913
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Storage Buffer:</b>	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Application:</b>	Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



Lane 1: LL-37 Peptide (50 ng)  
Lane 2: LL-37 Peptide (100 ng)  
Lane 3: LL-37 Peptide (200 ng)  
Lane 4: Human Neutrophils (10 µg)  
Lane 5: Human Neutrophils (20 µg)

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

LL-37 is a cationic  $\alpha$ -helical peptide expressed in human bone marrow, testis, granulocytes, gingival epithelium, and a variety of immune cells.<sup>1</sup> It is produced by proteolytic cleavage of the cathelicidin human cationic antimicrobial protein of 18 kDa (hCAP18).<sup>2</sup> LL-37 has antimicrobial and antiviral activity, and protein levels of LL-37 are increased in epithelial cells, macrophages, and neutrophils following bacterial infection *in vitro*.<sup>1,3-5</sup> It functions as a chemoattractant for human monocytes, neutrophils, and T cells, and induces chemokine secretion from epithelial cells in infected tissues.<sup>2,6</sup> LL-37 is a component of LPS-induced NETs produced from human neutrophils isolated from patients with systemic lupus erythematosus (SLE) or individuals without SLE.<sup>2</sup> It also enhances PMA- or *S. aureus*-induced formation of NETs.<sup>8</sup> LL-37 can be citrullinated by protein arginine deiminase 2 (PAD2) and PAD4, a modification that reduces its antibacterial and antiviral activities.<sup>5,9</sup> Native, but not citrullinated, LL-37 prevents mortality in a mouse model of D-galactosamine-sensitized endotoxic shock.<sup>9</sup> Cayman's LL-37 Polyclonal Antibody can be used for Western blot.

## References

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